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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/779,529	02/13/2004	Daniel V. Palanker	59599-20006.00	5591
25226	7590	11/17/2006	EXAMINER	
MORRISON & FOERSTER LLP			VRETTAKOS, PETER J	
755 PAGE MILL RD			ART UNIT	
PALO ALTO, CA 94304-1018			PAPER NUMBER	

3739

DATE MAILED: 11/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

NT

**Office Action Summary**

Application No.

10/779,529

Applicant(s)

PALANKER ET AL.

Examiner

Peter J. Vrettakos

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 August 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) 28-34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 and 35-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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### DETAILED ACTION

Claims 1-39 are pending. Claims 28-34 are withdrawn.

**New art is presented, which includes a source for pulsing electrical energy in bursts as claimed.** Malis et al. (4,590,934) discloses a voltage source configured to apply a plurality of pulses as claimed by the Applicant. See Malis et al. figure 18(f).

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-27 and 35-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heim et al. (6,533,781) in view of Malis et al. (4,590,934).

Heim discloses a voltage source (col. 9:17-19) *but does not disclose sufficiently to make obvious* a voltage source configured to apply a plurality of bursts of pulses separated by a burst interval as claimed by the Applicant.

Malis et al. however, does disclose a voltage source configured to apply a plurality of bursts of pulses separated by a burst interval as claimed by the Applicant and the source's output is seen in figure 18(f). Also see col. 10:38-44.

The rest of the parentheticals in the rejection refers to Heim.

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Conductive blade (22), slidably mounted (disposable – col. 8:32-37), insulators (32,34), voltage source (col. 9:17-19) and tungsten or titanium (col. 7:40-43).

Re: claims 1-5, 8-10, 14-18, 20-21 and 35-39 see MPEP 2144.05, *infra*. The Office argues that the claimed dimensions (radius of curvature) and parameters (pulse duration) would have been determined through routine experimentation.

## II. OPTIMIZATION OF RANGES

### A. Optimization Within Prior Art Conditions or Through Routine Experimentation

"[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955) see also *Peterson*, 315 F.3d at 1330, 65 USPQ2d at 1382 ("The normal desire of scientists or artisans to improve upon what is already generally known provides the **motivation** to determine where in a disclosed set of percentage ranges is the optimum combination of percentages.").

The ranges referred in the prior art (Heim) are the implied (they exist even though they might not be expressly mentioned) ranges of radius of curvature and pulse duration.

Re: claims 11, 13, 19, 22-26, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable (addressed above) of performing the intended use, then it meets the claim.

Therefore, at the time of the invention it would have been obvious to one of ordinary skill in the art to modify/optimize Heim in view of Malis et al. through routine experimentation. The motivation is that **referred** in MPEP 2144.05 IIA. listed above.

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Further, the motivation to use Malis et al.'s voltage source is to provide more control over energy pattern deposition as disclosed in Malis et al. col. 1:5-42.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-27 have been considered but are moot in view of the new ground(s) of rejection.

Prior 35 USC § 112 rejections are obviated through clarifying arguments dated 8-17-06.

Malis et al. (4,590,934) discloses a voltage source configured to apply a plurality of pulses as claimed by the Applicant. See Malis et al. figure 18(f).

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Malis et al. (5,318,563) and Rosenstock et al. (6,458,121).

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

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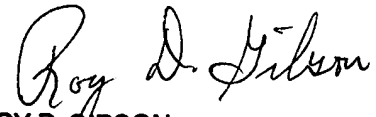
mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter J. Vrettakos whose telephone number is 571-272-4775. The examiner can normally be reached on M-F 9-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C. Dvorak can be reached on 571-272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Pete Vrettakos  
November 9, 2006 

  
ROY D. GIBSON  
PRIMARY EXAMINER